

Interdisciplinary Exploration ▪ *Dogs—Loyal Companions***Science: Developing a Classification System**

The table below lists characteristics of different dog breeds. Use these characteristics to develop a classification system. The questions that follow will help you develop your system.

Characteristics of Dogs

Breed	Ears	Coat	Tail	Head Shape	Size
Beagle	long	short-haired	long	round	small
Wire fox terrier	short	wire-haired	shortened	long	small
Chow chow	erect	long-haired	curly	round	medium
Irish setter	long	long-haired	feathered	long	medium
Newfoundland	short	long-haired	feathered	square	large
Boston terrier	erect	short-haired	shortened	square	small
Pug	short	short-haired	curly	square	small
Deerhound	short	wire-haired	long	long	large

Write your answers to the following questions on a separate sheet of paper.

1. What characteristic did you use first to divide the breeds into groups? Why did you choose that characteristic?
2. What characteristic did you use to make a second division within the groups?
3. Continue dividing the breeds into groups until you have used all five characteristics listed in the table. When you complete your classification system, diagram the structure of that system and show how each breed is classified.
4. Classify the following dog breeds using your classification system.
 - a. Great Dane: long ears, short-haired, long tail, long head, large size
 - b. Boxer: short ears, short-haired, shortened tail, square head, medium size
 - c. Shetland sheepdog: erect ears, long-haired, feathered tail, long head, small size
 - d. Airedale: short ears, wire-haired, shortened tail, long head, medium size